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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/416,902 10/13/1999		JOHN MCCAFFERTY	05569.0004.DVUS06	6750		
22930	7590	09/06/2006		EXAMINER		
HOWREY			STEELE, AMBER D			
		DEPARTMENT	ART UNIT	PAPER NUMBER		
2941 FAIRVIEW PARK DR, SUITE 200 FALLS CHURCH, VA 22042-2924			1639			
				DATE MAILED: 09/06/2006		

Please find below and/or attached an Office communication concerning this application or proceeding.

# Advisory Action Before the Filing of an Appeal Brief

Application No.	Applicant(s)		
09/416,902	MCCAFFERTY ET AL.		
Examiner	Art Unit		
Amber D. Steele	1639		

		Amber D. Steele	1639	
	The MAILING DATE of this communication appe	ears on the cover sheet with the c	correspondence add	ress
THE RE	PLY FILED 15 August 2006 FAILS TO PLACE THIS A	PPLICATION IN CONDITION FOR	ALLOWANCE.	
I.⊠ Th thi pla a∃	e reply was filed after a final rejection, but prior to or or sapplication, applicant must timely file one of the followaces the application in condition for allowance; (2) a No Request for Continued Examination (RCE) in compliance periods:	n the same day as filing a Notice of wing replies: (1) an amendment, aff otice of Appeal (with appeal fee) in o	Appeal. To avoid aba fidavit, or other evider compliance with 37 C	nce, which FR 41.31; or (3)
a) 🛚	The period for reply expires 5 months from the mailing date. The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire Examiner Note: If box 1 is checked, check either box (a) or TWO MONTHS OF THE FINAL REJECTION. See MPEP 7	Advisory Action, or (2) the date set forth later than SIX MONTHS from the mailin (b). ONLY CHECK BOX (b) WHEN THI	g date of the final reject	on.
nave bee under 37 set forth may redu	ns of time may be obtained under 37 CFR 1.136(a). The date n filed is the date for purposes of determining the period of ex CFR 1.17(a) is calculated from: (1) the expiration date of the n (b) above, if checked. Any reply received by the Office late ce any earned patent term adjustment. See 37 CFR 1.704(b) OF APPEAL	tension and the corresponding amount shortened statutory period for reply orig r than three months after the mailing da	of the fee. The appropr inally set in the final Offi	iate extension fee ce action; or (2) as
fili a	e Notice of Appeal was filed on A brief in comp ng the Notice of Appeal (37 CFR 41.37(a)), or any exte Notice of Appeal has been filed, any reply must be filed MENTS	ension thereof (37 CFR 41.37(e)), to	avoid dismissal of th	
— (a (b	he proposed amendment(s) filed after a final rejection, They raise new issues that would require further co They raise the issue of new matter (see NOTE belo They are not deemed to place the application in be	onsideration and/or search (see NO ow);	TE below);	
	appeal; and/or  They present additional claims without canceling a  NOTE: (See 37 CFR 1.116 and 41.33(a)).	corresponding number of finally rej		
5. 🔯 A 6. 🔲 N	ne amendments are not in compliance with 37 CFR 1.1 pplicant's reply has overcome the following rejection(s) ewly proposed or amended claim(s) would be a n-allowable claim(s).	21. See attached Notice of Non-Co ): <u>35 U.S.C. §§ 102(a,e) regarding l</u>	Dower U.S. Patent 5,4	127,908.
7. X Fe ho Th CI CI	or purposes of appeal, the proposed amendment(s): a) we the new or amended claims would be rejected is prose status of the claim(s) is (or will be) as follows: aim(s) allowed: <u>none</u> .  aim(s) objected to: <u>none</u> .		ill be entered and an e	explanation of
CI	aim(s) rejected: <u>44, 47, 48, 61, 62</u> . aim(s) withdrawn from consideration: <u>none</u> . <u>VIT OR OTHER EVIDENCE</u>			
be wa	e affidavit or other evidence filed after a final action, bucause applicant failed to provide a showing of good and not earlier presented. See 37 CFR 1.116(e).	d sufficient reasons why the affida	vit or other evidence i	s necessary and
er sh	e affidavit or other evidence filed after the date of filing tered because the affidavit or other evidence failed to owing a good and sufficient reasons why it is necessar	overcome <u>all</u> rejections under appe y and was not earlier presented. S	al and/or appellant fa See 37 CFR 41.33(d)(	ils to provide a 1).
	he affidavit or other evidence is entered. An explanation ST FOR RECONSIDERATION/OTHER	on of the status of the claims after e	entry is below or attac	hed.
ן ⊠ .11 2	he request for reconsideration has been considered by blease refer to the attached Adisory Action (cont.).			nce because:
	lote the attached Information Disclosure Statement(s). Other:	(PTO/SB/08 or PTO-1449) Paper N	No(s)	
13. 🔲 🤇		SUPERVISO TECHNOI	ER PARAS, JR. Ry patent examine Logy center 1600	R
		(V31)	1) Hungar	

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### Advisory Action (cont.)

1. The response to the final rejection received on August 15, 2006 has been considered but is not deemed to place the application in condition for allowance.

#### Withdrawn Rejection

2. The rejection of claims 44, 47, and 48 under 35 U.S.C. § 102 (a, e) as being anticipated by Dower et al. U.S. Patent 5,427,908 is withdrawn due to applicants' arguments in the response received on August 15, 2006.

#### Arguments and Response

3. Applicants' arguments directed to the rejection under 35 U.S.C. 102 (e) as being anticipated by Ladner et al. U.S. Patent 5,837,500 for claims 44, 47, and 48 were considered but are not persuasive for the following reasons.

Applicants contend that Ladner et al. (U.S. Patent 5,837,500) "does not disclose display on filamentous bacteriophage multi-chain proteins such as Fab antibody fragments" and that Ladner et al. teaches a preferred embodiment of displaying small peptide fragments of approximately 40 amino acids in length do not read on the larger Fab antibody fragments (e.g. approximately 400 amino acids) and reference the *Penguin Dictionary of Biology* (1994). In addition, applicants contend that scFv do not read on the presently claimed invention.

Applicants' arguments are not convincing since the teachings of Ladner et al. (U.S. Patent 5,837,500) anticipate the presently claimed method of obtaining a member of a specific binding pair. It is the examiner's position that Ladner et al. disclose Fab (please refer to columns 15) wherein patents are relevant as prior art for all they contain therefore a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art

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including nonpreferred embodiments (please refer to MPEP § 2123; Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPQ2d 1516, 1522-23 (Fed. Cir. 1998)). In addition, Ladner et al. teaches phage display of binding proteins (please refer to columns 51-57 and claims 1, 5, 19, 20, 21). Furthermore, applicants' arguments regarding the length of the Fab antibody fragment is moot considering that the features upon which applicant relies (e.g. Fab fragment is about 400 amino acids long) is not recited in the present claims and Ladner et al. teach that Fab are 440 amino acids in length (please refer to column 15). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Moreover, the claim language of present claim 44 which recites "Fab antibody fragments" appears to be either redundant or broadening the scope of Fab. For example, it is art recognized that Fab is an acronym for antibody fragment or antigen-binding fragment (e.g. V<sub>H</sub>, C<sub>H1</sub> or C<sub>v1</sub>, V<sub>L</sub>, C<sub>L</sub> wherein the heavy chain and the light chain are linked via a disulfide bond) therefore the presently claimed invention claims an antibody fragment of an antibody fragment which given the broadest possible interpretation could read on scFv, V<sub>L</sub>, V<sub>H</sub>, etc. (please refer to MPEP § 2111). Therefore, the presently claimed invention is anticipated by the teachings of Ladner et al. (U.S. Patent 5,837,500).

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4. Applicants' arguments directed to the rejection under 35 U.S.C. 102 (a or e) as being anticipated by Ladner et al. U.S. Patent 6,979,538 (U.S. Patent application 2002/0150881) for claims 44, 47, 48, 61, and 62 were considered but are not persuasive for the following reasons. Art Unit: 1639

Applicants contend that Ladner et al. (U.S. Patent 6,979,538) "does not disclose display on filamentous bacteriophage of a multi-chain polypeptide including Fab fragment of an antibody" and scFv are not multi-chain antibody fragments.

Applicants' arguments are not convincing since the teachings of Ladner et al. (U.S. Patent 6,979,538) anticipate the presently claimed method of obtaining a member of a specific binding pair. It is the examiner's position that Ladner et al. (U.S. Patent 6,979,538) teach Fab (please refer to column 15) wherein patents are relevant as prior art for all they contain therefore a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art including nonpreferred embodiments (please refer to MPEP § 2123; Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPO2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989); Celeritas Technologies Ltd. v. Rockwell International Corp., 150 F.3d 1354, 1361, 47 USPO2d 1516, 1522-23 (Fed. Cir. 1998)). In addition, Ladner et al. teach phage display of binding proteins (please refer to columns 48-57 and claims 1, 3, 4, 7, 8, 9, 10, 11, 12, 15, 16, 17). Furthermore, applicants' arguments regarding that the Fab antibody fragment must be a multi-chain is moot considering that the features upon which applicant relies (e.g. multichain) is not recited in the present claims and Ladner et al. teach that Fab which are multi-chain (please refer to column 15). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See In re Van Geuns, 988 F.2d 1181, 26 USPO2d 1057 (Fed. Cir. 1993). Moreover, the claim language of present claim 44 which recites "Fab antibody fragments" appears to be either redundant or broadening the scope of Fab. For example, it is art recognized that Fab is an acronym for antibody fragment or antigen-binding fragment (e.g. V<sub>H</sub>, C<sub>H1</sub> or C<sub>V1</sub>, V<sub>L</sub>, C<sub>L</sub> wherein the heavy chain and the light

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chain are linked via a disulfide bond) therefore the presently claimed invention claims an antibody fragment of an antibody fragment which given the broadest possible interpretation could read on scFv, V<sub>L</sub>, V<sub>H</sub>, etc. (please refer to MPEP § 2111). Therefore, the presently claimed invention is anticipated by the teachings of Ladner et al. (U.S. Patent 6,979,538).

#### **Future Communications**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amber D. Steele whose telephone number is 571-272-5538. The examiner can normally be reached on Monday through Friday 9:00AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Paras can be reached on 571-272-4517. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ADS August 30, 2006